

REMARKS/ARGUMENTS

The telephone interview granted by the Examiner to applicant's undersigned attorney on August 25, 2003 is noted with appreciation. The above amendment is made following and in accordance with the interview.

Claims 1-88, 92-94 stand canceled.

Claims 90, 91 are original.

Claim 89 was previously amended.

Claims 98, 99 were previously added.

Claims 95-97 are currently amended.

This amendment leaves claims 89-91, 95-99 pending, of which claims 89, 95, 96, 97 are independent.

The Examiner's comments on pages 7 and 8 of the Office Action regarding applicant's arguments are noted with appreciation. The Examiner notes the basis of the rejection on the combination of Purvey U.S. Patent 5,906,733 and Holm et al. U.S. Patent 5,779,900, including replacing Purvey's filter with Holm et al.'s filter. The above amendment and the following remarks are believed responsive to the basis of rejection, and consideration is respectfully requested.

Claim 89 requires that the defined standpipe (180, Fig. 3) have an upper end (186) at the defined transfer passage (146), and has a lower end (188) at the drain passage (111), and wherein the contaminant-laden fluid comprises contaminant-laden liquid in a gas stream, and such that during rotation, gas in the gas stream from the transfer passage is vented through the defined inner annular chamber (182) to the drain passage (111), and contaminant-laden liquid from the transfer passage (146) is centrifugally propelled into the outer annular chamber (184). This venting is shown in Fig. 4 at arrow 192. Claim 89 has been rejected over Purvey '733 in view of Holm et al. '900. Even upon combining Purvey and Holm et al., and replacing the Purvey filter with the Holm et al. filter, the resultant combination still does not meet the limitations of claim 89, nor are the requirements of claim 89 even possible in the resultant combination of Purvey and Holm et al. The required venting defined in claim 89 is not disclosed nor possible in the Purvey/Holm et al.

combination because, after substitution of the Holm et al. filter for the Purvey filter, venting downwardly through stand tube 42 of Purvey '733 is blocked by septum 45 (Col. 5, line 8). There is no exit from the upper part of stand tube 42 at transfer passage 68 other than through aperture 46 as shown in Fig. 2 of Purvey '733, and hence there is no venting as at 192 in Fig. 4 of the present application and as required by claim 89. Consideration and allowance of claim 89 is earnestly solicited.

Claim 90 depends from claim 89 and defines a subcombination.

Claim 91 depends from claim 89 and defines a subcombination. Claim 91 requires that the rotor further comprise a disposable liner shell (170) extending along and lining the interior of the outer cylindrical sidewall and accumulating and containing contaminant, such that the centrifuge may be serviced by removing the outer cylindrical sidewall and discarding the disposable liner shell capsule with contained contaminant therein and replacing same with another disposable liner shell capsule.

Claim 95 defines three fluids, namely a drive fluid, a backflushing fluid, and a working fluid, and requires that the drive fluid be the same as the backflushing fluid and different than the working fluid. Claim 95 has been rejected over Purvey '733 in view of Holm et al. '900. Even upon combining Purvey and Holm et al., and replacing the Purvey filter with the Holm et al. filter, the resultant combination still does not meet the limitations of claim 95. As noted by the Examiner, Purvey '733 discloses an alternate embodiment at Col. 9, lines 6-10, wherein the drive fluid may comprise the working fluid pumped through the system as disclosed, or may comprise a fluid, liquid or gas from a separate source. In substituting the Holm et al. filter for the Purvey filter, and utilizing the noted alternate embodiment disclosed in Purvey, the resultant combination still contains no teaching of the conjunctive requirement in claim 95 that the drive fluid be the same as the backflushing fluid. In substituting the Holm et al. filter 102 for filter 13 of Purvey '733, Fig. 1, the defined first inlet of the filter in claim 95 can be provided by inlet 114 of Holm et al. '900, the defined first outlet can be provided by Holm et al. outlet 116, the defined second inlet can be provided by Holm et al. inlet 118, and the defined second outlet can be provided by Holm et al. outlet 122. Holm et al. first inlet 114 would replace Purvey filter inlet 17, Holm

et al. first outlet 116 would replace Purvey outlet 18, Holm et al. second inlet 118 would not have a counterpart in Purvey, and Holm et al. second outlet 122 would replace Purvey second outlet 23 to supply backflushed contaminant-laden working fluid through rejection conduit 24 of Purvey to centrifuge 25. While Purvey does teach that centrifuge 25 can be driven by working fluid from pump 12 or alternatively (Col. 9, lines 6-10), the drive fluid may comprise a fluid, liquid or gas from a separate source, there is no teaching or suggestion of using different backflushing and working fluids in combination with the use of a backflushing fluid which is the same as the drive fluid, absent applicant's disclosure. The latter conjunctive limitation would require re-engineering and re-plumbing of Purvey and Holm et al., not just a combination thereof. The noted limitations of claim 95 would require the recognition that the four-port filter structure of Holm et al. '900 can be substituted for the three-port filter structure of Purvey '733, and that the fourth or remaining port 118 in Holm et al. '900 (not present and unused in Purvey '733) can be plumbed in parallel with the centrifuge drive fluid, for example as shown in Fig. 1 of the present application at parallel plumbed lines 140 and 136 providing backflushing fluid to the filter and providing drive fluid to the centrifuge, respectively. The mental step and gap from the three-port filter structure of Purvey '733 to the four-port filter structure of Holm et al. '900 and the required re-plumbing meeting in combination the limitations set forth in claim 95 are not suggested nor obvious absent applicant's disclosure. There is no suggestion in the references for the defined combination, and furthermore even if such combination is attempted, there is no reference or teaching filling the noted gap to utilize the fourth or remaining port 118 of Holm et al. and the required plumbing thereof to yield the combination defined in claim 95. It is respectfully submitted that bridging of the noted gap is not obvious because mere substitution or replacement does not yield an operative structure satisfying the claim requirements. It is thus respectfully submitted that even if Purvey '733 and Holm et al. '900 are combined, and the Purvey filter 13 is replaced with the Holm et al. filter 102, the resultant combination is still deficient and does not render obvious the combination defined in claim 95. Consideration and allowance of claim 95 is earnestly solicited.

Claim 96 defines a combination requiring that the rotor (96) have an inner cylindrical sidewall (102), and an outer cylindrical sidewall (106) spaced radially outwardly of the inner cylindrical sidewall (102), and requires a turbine (128) on the outer cylindrical sidewall (106). Claim 96 has been rejected over Purvey '733 and Holm et al. '900 further in view of May U.S. Patent 6,210,311. In May '311, the turbine is spaced radially inwardly of the outer cylindrical sidewall, and is not on the outer cylindrical sidewall such as 106 in the present application. This structural distinction is not taught or suggested in the references.

Claim 97 requires that the rotor base plate (110) have a configured surface (160) having an upper-height outer portion (162) adjacent the outer cylindrical sidewall (106), a lower pocket portion (164), and an intermediate-height inner portion (166) adjacent the inner cylindrical sidewall (102), and further that the configured surface (160) be tapered radially inwardly and downwardly from the upper-height outer portion (162) to the lower pocket portion (164) and then upwardly to the intermediate-height inner portion (166), and further that the upper-height outer portion (162) have a height higher than the intermediate-height inner portion (166), and further that the intermediate-height inner portion (166) have a height greater than the lower pocket portion (164), and further that the drain passage (111) be at the intermediate-height inner portion (166), such that separated contaminant not retained by the high-loft filter media (148) is collected in the lower pocket portion (164), and fluid above the collected contaminant in the lower pocket portion (164) drains to the drain passage (111). Claim 97 has been rejected over Purvey '733 in view of Holm et al. '900 further in view of Miller et al. U.S. Patent 5,707,519. Even upon combining the references including Miller et al. '519, the resultant combination still does not yield nor meet the structural limitations of claim 97 including the defined upper-height outer portion (162), lower pocket portion (164), and intermediate-height inner portion (166), the defined relative heights thereof, and the combinational requirement that the drain passage (111) be at the intermediate-height inner portion (166) adjacent the inner cylindrical sidewall (102) and that separated contaminant not retained by the high-loft filter media (148) be collected in the lower pocket portion (164) and that fluid above the collected contaminant in the lower pocket portion (164) drains to the drain passage (111) at the intermediate-height inner

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portion (166) adjacent the inner cylindrical sidewall (102). Consideration and allowance of claim 97 is respectfully requested.

Claim 98 depends from claim 89 and defines a subcombination further requiring that the standpipe (180) have an upper reach at the upper end (186) at a level vertically below the defined transfer passage (146). Claim 98 has been rejected over Purvey '733 in view of Holm et al. '900. Even upon combination of Purvey and Holm et al., including substitution and replacement of the Holm et al. filter for the Purvey filter, the result still does not yield and is deficient in meeting the structural requirement of claim 98 that the upper reach of the standpipe (180) at the upper end (186) be at a level vertically below the defined transfer passage (146). Consideration and allowance of claim 98 is respectfully requested.

Claim 99 depends from claim 98 and defines a subcombination including the defined drainage structure unmet by the references.

It is believed that this application is now in condition for allowance with claims 89-91, 95-99, and such action is earnestly solicited.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

Michael E. Taken

Michael E. Taken
(Reg. No. 28,120)

100 East Wisconsin Avenue, Suite 1100
Milwaukee, Wisconsin 53202
(414) 271-7590